

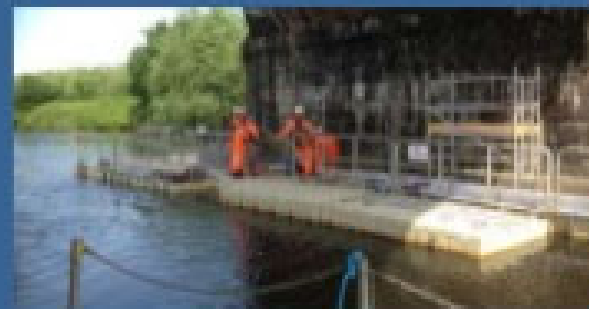
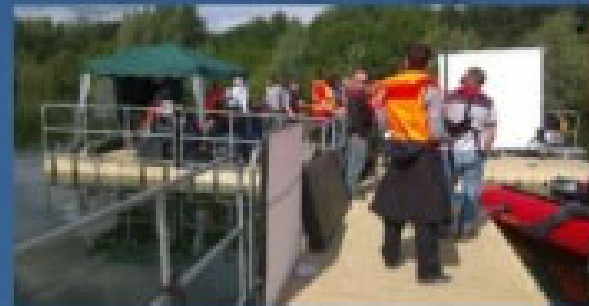


Safety



Working Near Water

- Working near water presents a range of health & safety issues that need to be properly managed
- Basic principles involve: identification of hazards, assessment of risks, designing safe systems of work, ensuring the workforce are properly trained, equipped and supervised, and having appropriate procedures in place
- It is essential, when working on or near water that safe systems of work are in place based on a thorough risk assessment and that staff are properly trained and instructed



What are some of the hazards?

Working on equipment in the pit

Impoundment ponds

Working on floating pumping stations

Operating dredges or other equipment near water

And of course...Slips, trips and falls when working around water

**DID YOU KNOW
THAT...**



A yellow excavator is positioned in a wooded area, with a stream visible in the background. The excavator's arm is raised, and it appears to be working on a dirt bank. The scene is set in a natural, wooded environment with trees and foliage. The text is overlaid on the image in a large, bold, white font.

**Between 2005 and
2016 there were 24
water related
fatalities in Metal and
Nonmetal Mining.**

A yellow excavator is positioned on a narrow concrete bridge or structure over a river. The excavator's arm is raised. The background shows a dense forest of bare trees. The text is overlaid in a large, bold, white serif font.

**The hazards of working
near water are clear...
Entrapment
&
Drowning.**

Let's Keep It Simple!!



30CFR, 56.15020

Life jackets or belts shall be worn where there is danger from falling into water.

NOTICE

**LIFE JACKETS
MUST BE WORN
BEYOND THIS POINT**



SIMPLY

WEAR IT!

What are some reasons some miners don't wear their Life Jackets or Belts, aka...PFD?



It's too TIGHT!!

It's too HOT!!

It's too RESTRICTING!! I can't
work with it on!!!

I forgot it!! I'm only going to be
a minute!!

I don't REALLY Need It!!

**So...What are some
of the Risks??**

There are a number of risk factors that are intensified when water is involved:

- **Equipment weight and vibration**
- **Undercut banks** (56.3401, Examination of Ground Conditions)
- **Sloughing ground**
- **Varied water depth**
- **Swift currents**
- **Inadequate berms**
- **Narrow roadways**
- **Electrocution**

**Shedoministraceen
happden?**

- #1
- A mine worker was operating a bulldozer to construct a ramp from one mine level to another. After completing the ramp, he decided to place a bund around the sump. He tested the sump depth by placing the blade into it. He thought the sump was shallow and backed the bulldozer into the sump to clean it out. However, in the test the blade had rested on the sump side not the bottom, and the bulldozer ended up partially submerged.



- #2
- After assessing the situation and completing a risk assessment, a mine supervisor, excavator operator and an electrician began moving an electric pump to deal with very high water in the mine sump. The operator attached the pump and pontoon to the excavator's lifting eye with the supervisor holding the cables clear of the excavator acting as spotter. As the operator was about to position the pump, the safety berm and bank gave way and the excavator slipped into the water. The high water level had decreased the ramp's stability and the sides collapsed with the excavator's weight on its edge. The supervisor slipped towards the water but managed to find his footing and got clear of excavator. The excavator operator managed to climb through a side window of the vehicle.



- #3
- An excavator was loading trucks with sump slops for the working shift.
- While waiting for trucks, the excavator operator had been sidecasting pond material. During this process the excavator slipped sideways on solid rock into the pond. The operator tried to correct the slipping by pushing back on his bucket. This action tipped the excavator sideways into the pond. The excavator cab was partly submerged in water. The operator exited the machine cab via its rear window.



- #4
- A mine worker moving an excavator between two sites encountered a road closure on the normal access route. He decided to detour across a pond division wall. Smaller excavators had traversed it on previous occasions. When the excavator was halfway across, the wall failed under the weight of the excavator causing it to tip sideways cab down in the water. The worker was lucky to escape as the cab was almost submerged.



- #5
- A quarry worker operating a long Reach Komatsu PC200 excavator was tasked with clearing slurry from a pond at a sand quarry. The worker emptied his bucket and was slewing left, when the ground under the excavator gave way, causing it to slowly topple into the pond. The worker was helped out of the excavator by other workers.



***These miners weren't
so lucky!***



On June 13, 2018, a 65-year old truck driver with 4 years of experience was fatally injured when his truck traveled over a berm and into an impoundment of water. Divers recovered the victim in 20 feet of water.



COAL MINE FATALITY – On December 29, 2018, a 25-year old dredge operator, with 21 weeks of experience, was fatally injured at a coal mine. The victim drowned when the dredge he was operating sank.

88% of Mine Fatalities involving
water could have been prevented
by using a Personal Flootation
Device...A Life Jacket!!



One of these could save someone's life..TODAY!!!





**Tomorrow
is your reward
for working
safely today.**

Thank You for
your
Attention!!
Any Questions?
Have a Great
Safety
Conference
Work SAFE!!!



Occupational Safety Training & Consulting, LLC

573-210-1520

chuckc@ostc.us

**MSHA
Safety
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**First Aid
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Chuck Cantrell, Owner/Consultant

www.ostc.us